



**AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED**

**PROJECT NAME AND NUMBER: RFQ 29554 PAVEMENT ASSESSMENT AND REPAIRS FOR A PERIOD OF 12 MONTHS**

**CONTRACTOR APPOINTMENT FOR PAVEMENT ASSESSMENT AND REPAIRS FOR A PERIOD OF 12 MONTHS AT KING SHAKA INTERNATIONAL AIRPORT**

**NEC 3: ENGINEERING AND CONSTRUCTION CONTRACT (ECC)**

**Between AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED**

**Applicable at KING SHAKA INTERNATIONAL AIRPORT**

(Registration Number: 1993/004149/30)

and

\_\_\_\_\_  
(The Contractor)

(Registration Number: \_\_\_\_\_)

for **PAVEMENT ASSESSMENT AND REPAIRS FOR A PERIOD OF 12 MONTHS AT KING SHAKA INTERNATIONAL AIRPORT**

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## Part C1: Agreements and Contract Data

### C1.1: Form of Offer and Acceptance

#### OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of: **PAVEMENT ASSESSMENT AND REPAIRS CONTRACT FOR A PERIOD OF 12 MONTHS AT KING SHAKA INTERNATIONAL AIRPORT**

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the **Contractor** under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

#### THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

(in ..... words)  
..... Rands;

(in figures) R.....

#### THE OFFERED PRICES ARE AS STATED IN THE PRICING SCHEDULE

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the **Contractor** in the conditions of contract identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the  
Bidder:**

Name &  
signature of  
witness

*(Insert name and address of  
organisation)*

Date

## ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the **Contractor** the amount due in accordance with the conditions of contract identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Unless the tenderer (now **Contractor**) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)

Name(s)

Capacity

for the  
Employer

**Airports Company South Africa SOC Limited**

King Shaka International Airport,  
La Mercy,  
KwaZulu-Natal,  
4407

*(Insert name and address of  
organisation)*

Date

Name &  
signature of  
witness

.....

**Schedule of Deviations**

1 Subject .....	
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Details .....	
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2 Subject .....	
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Details .....	
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3 Subject .....	
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Details .....	
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By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

	<b><u>For the Employer</u></b>	<b><u>For the Bidder</u></b>
Signature (s)	.....	.....
Name (s)	.....	.....
Capacity	.....	.....
<b>Name and Address</b>	<b>Airports Company South Africa SOC Limited</b>  King Shaka International Airport, La Mercy, KwaZulu-Natal, 4407	
Name & Signature of witness	..... <i>(Insert name and address of organisation)</i>	..... <i>(Insert name and address of organisation)</i>
Date	.....	.....

## Part C1.2a Contract Data

### Part one – Data provided by the *Employer*

The Conditions of contract are selected from the NEC3 Engineering and Construction Contract, April 2013.

Each item of data given below is cross-referenced to the NEC3 Engineering Construction Contract which requires it.

Clause	Statement	Data
<b>1</b>	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for Main Option	
	Main Option	<b>B: Priced contract with Bill of Quantities</b>
	Dispute resolution Option	<b>W1: Dispute resolution procedure</b>
	Secondary Options (incorporating amendments)	<b>X7: Delay damages</b> <b>X16: Retention</b> <b>X18: Limitation of liability</b> <b>Z: Additional conditions of contract</b> of the NEC3 Engineering and Construction Contract, April 2013
10.1	The <i>Employer</i> is (Name)	Airports Company South Africa SOC Limited, King Shaka International Airport
	Address	Airports Company South Africa SOC Limited  King Shaka International Airport, La Mercy, KwaZulu-Natal, 4407
	Telephone	(032) 436 6000
	Fax	(032) 436 6672
10.1	The <i>Project Manager</i> is: Matsobane Teffo	
	Address	KING SHAKA INTERNATIONAL AIRPORT LA MERCY 4407
	Telephone	077 601 9527
	E-mail address	Matsobane.teffo@airports.co.za

10.1	The <i>Supervisor</i> is	Siphiwe Msimango
	Address	KING SHAKA INTERNATIONAL AIRPORT LA MERCY 4407
	Telephone	
	Fax	
	Email	
11.2	The <i>works</i> are	<b>PAVEMENT ASSESSMENT AND REPAIRS FOR A PERIOD OF 12 MONTHS AT KING SHAKA INTERNATIONAL AIRPORT</b>
11.2	The following matters will be included in the Risk Register	<ul style="list-style-type: none"> <li>• Access to Site</li> <li>• Delay in supply of materials and/or equipment</li> <li>• Progress of works against the program</li> <li>• Airport Operations</li> <li>• Occupational Health and Safety</li> <li>• Existing Services</li> <li>• Travelling public and ACSA stakeholders</li> </ul>
11.2	The <i>Works Information</i> is in	Part C3 'Service Information' section of this contract
11.2	The <i>Site Information</i> is in	Part C4 'Works Information' section of this contract
11.2	The <i>boundary of the site</i> is	Refer to C3.1 'Service Information' for the location and boundary of works for the respective phases
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period of reply</i> is	Seven (7) days
<b>3</b>	<b>Time</b>	
31.2	The <i>starting date</i> is	Upon signing of contract by ACSA
11.2	The <i>completion date</i> is	Eighteen (12) months from the Starting Date
30.1	The <i>access date</i> is	Access will be granted immediately once all applicable permits have been obtained



31.1	The <i>Contractor</i> submits a first (preliminary) programme with the tender by the tender closing date	Within two weeks of the of signing the contract
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	Four (4) weeks
35.1	The <i>Employer</i> is not willing to take over the works before the <i>completion date</i>	The <i>Employer</i> and Others will have access to the <i>works</i> during construction or prior to completion. Such access by the Employer and Others shall not relieve the <i>Contractor</i> from liability for the completion of the <i>works</i> in accordance with the Works Information and in terms of this contract.
<b>4</b>	<b>Testing and Defects</b>	
42.2	The <i>defects date</i> is	Six (6) months after Completion of the whole of the <i>works</i>
43.2	The <i>defects correction period</i> is	One (1) week
<b>5</b>	<b>Payment</b>	
50.1	The <i>assessment interval</i> is	Four (4) weeks
50.1	The <i>currency of this contract</i> is the	South African Rand
51.2	The period within which payment is made is	Four (4) weeks
51.4	The <i>interest rate</i> is	The prime lending rate of the Nedbank Bank. as determined from time to time
<b>6</b>	<b>Compensation events</b>	No data
<b>7</b>	<b>Title</b>	No data required for this section of the <i>conditions of contract</i>
<b>8</b>	<b>Risks and Insurance</b>	
84.1	The <i>Employer</i> provides these insurances	Refer to the Insurance Clauses which is attached at the end of the Contract Data
84.2	The <i>Contractor</i> provides the insurance stated in	The Insurance Clauses which is attached at the end of the Contract Data. The insurances are in the joint names of the Parties and provide cover for events which are at the Contractor's risk from the starting date until the Defects Certificate or a termination certificate has been issued.
	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993
<b>9</b>	<b>Termination</b>	No data required for this section of the <i>conditions of contract</i>

**10 Data for Main Options**

<b>B</b>	Priced contract with Bill of Quantities	Standard System of Measuring Building Works (Sixth Edition), SANS 1200 Standard Specifications, Particular Specifications (if applicable) and all amended as stated in the preamble to the bill of quantities and as measured for items in bill of quantities
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**11 Data for Option W1**

W1.1	The <i>Adjudicator</i> is	The person appointed jointly by the parties from the list of adjudicators contained below in Annexure A
W1.2	The <i>Adjudicator nominating body</i> is	The current Chairman of Johannesburg Advocate's Bar Council
W1.4	The <i>tribunal</i> is	Arbitration
W1.4	If the <i>tribunal</i> is arbitration, the arbitration procedure is	The latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
W1.4	The place where arbitration is to be held is	In the city where the Site is located, within South Africa.
W1.4	The person or organisation who will choose an arbitrator	The <i>Arbitrator</i> is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Arbitrators provided under the relevant Z clause if the arbitration procedure does not state who selects an arbitrator. The Arbitrator nominating body is the Chairman of the Johannesburg Advocates Bar Council.

**12 Data for Secondary Option Clauses****X7 Delay Damages**

X7.1	The rate is	Daily penalties are calculated as 0.5% of the specific repair works claim per day delayed.
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**X16 Retention**

X16.1	The <i>retention percentage</i> is	10% of the Contract value.
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**X18 Limitation of Liability**

X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to	Nil - Neither Party is liable to the other for any consequential or indirect loss, including but not limited to loss of profit, loss of income or loss of revenue
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X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	Total of the losses incurred and/or repairs to the damages caused
X18.3	The <i>Contractor's</i> total liability to the <i>Employer</i> for defects due to his design which are not listed on the Defects Certificate is limited to	Total of the losses incurred and/or repairs to the damages caused
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to	<p>The <i>Contractor's</i> total direct liability to the <i>Employer</i> for all matters arising under or in connection with this contract, and the excluded matters, is unlimited and applies in contract, tort or delict and otherwise to the extent allowed under the law of the contract.</p> <p>The excluded matters are amounts payable by the <i>Contractor</i> as stated in this contract for</p> <ul style="list-style-type: none"> <li>- Loss of or damage to the <i>Employer's</i> property,</li> <li>- Delay damages,</li> <li>- Defects liability,</li> <li>- Insurance liability to the extent of the <i>Contractor's</i> risks</li> <li>- loss of or damage to property (other than the <i>works</i>, Plant and Materials),</li> <li>- death of or injury to a person;</li> <li>- damage to third party property; and</li> <li>- infringement of an intellectual property right</li> </ul>
<b>Z</b>	<b>The <i>Additional conditions of contract</i> are</b>	<b>Z1 – Z20</b>
	<b>Amendments to the Core Clauses</b>	
<b>Z1</b>	<b>Interpretation of the law</b>	
<b>Z1.1</b>	<b>Add to core clause 12.3:</b> Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the <i>Project Manager</i> , the <i>Supervisor</i> , or the <i>Adjudicator</i> does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.	
<b>Z2</b>	<b>Providing the Works:</b>	
<b>Z2.1</b>	<b>Delete core clause 20.1 and replace with the following:</b> The <i>Contractor</i> provides the works in accordance with the Works Information and warrants that the results of the Works, when complete, shall be fit for their intended purpose	
<b>Z3</b>	<b>Other responsibilities:</b>	

<b>Add the following at the end of core clause 27:</b>	
<b>Z3.1</b>	The <i>Contractor</i> shall have satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information and drawings provided to him as at the Contract Date
<b>Z3.2</b>	The <i>Contractor</i> shall be responsible for the correct setting out of the <i>Works</i> in accordance with the original points, lines and levels stated in the <i>Works</i> Information or notified by the <i>Project Manager</i> , <i>Supervisor</i> or the <i>Employer</i> . Any errors in the positioning of the <i>Works</i> shall be rectified by the <i>Contractor</i> at the <i>Contractor's</i> own costs.
<b>Z4</b>	<b>Extending the defects date:</b>
<b>Add the following as a new core clause 46:</b>	
<b>Z4.1</b>	If the <i>Employer</i> cannot use the <i>works</i> due to a Defect, which arises after Completion and before the <i>defects date</i> , the <i>defects date</i> is delayed by a period equal to that during which the <i>Employer</i> , due to a Defect, is unable to use the <i>works</i>
<b>Z4.2</b>	If part of the <i>works</i> is replaced due to a Defect arising after Completion and before the <i>defects date</i> , the <i>defects date</i> for the part of the <i>works</i> which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced
<b>Z4.3</b>	The <i>Project Manager</i> notifies the <i>Contractor</i> of the change to a <i>defect date</i> when the delay occurs. The period between Completion and an extended <i>defects date</i> does not exceed twice the period between Completion and the <i>defects date</i> stated in the Contract Data
<b>Z5</b>	<b>Termination</b>
<b>Z5.1</b>	<b>Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words “assets or”:</b> “business rescue proceedings are initiated or steps are taken to initiate business rescue proceedings”.
<b>Amendment to the Secondary Option Clauses</b>	
<b>Z6</b>	<b>Performance Bond</b>
<b>Z6.1</b>	<b>Amend the first sentence of clause X13.1 to read as follows:</b> The <i>Contractor</i> gives the <i>Employer</i> an unconditional, on-demand performance bond, provided by a bank which the <i>Project Manager</i> and the <i>Employer</i> have accepted, for the amount stated in the Contract Data and in the form set out in Annexure C of this Contract Data.
<b>Z6.2</b>	<b>Add the following new clause as Option X13.2:</b> The <i>Contractor ensures</i> that the performance bond is valid and enforceable until the end of the <i>contract period</i> . If the terms of the performance bond specify its expiry date and the end of the <i>contract period</i> does not coincide with such expiry date, four weeks prior to the said expiry date, the <i>Contractor</i> extends the validity of the performance bond until the end of the <i>contract period</i> . If the <i>Contractor</i> fails to so extend the validity of the performance bond, the <i>Employer</i> may claim the full amount of the performance bond and retain the proceeds as cash security
<b>Z7</b>	<b>Limitation of liability:</b>
<b>Insert the following new clause as Option X18.6:</b>	
<b>Z7.1</b>	The <i>Employer's</i> liability to the <i>Contractor</i> for the <i>Contractor's</i> indirect or consequential loss is limited to R0.00
<b>Z7.2</b>	Notwithstanding any other clause in this contract, any proceeds received from any insurances or any proceeds which would have been received from any insurances but for the conduct of the <i>Contractor</i> shall be excluded from the calculation of the limitations of liability listed in the contract

Additional Z Clauses	
<b>Z8</b>	<b>Cession, delegation and assignment</b>
<b>Z8.1</b>	The <i>Contractor</i> shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> , which consent shall not be unreasonably withheld. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the <i>Contractor</i>
<b>Z8.2</b>	The <i>Employer</i> may cede and delegate its rights and obligations under this contract to any person or entity
<b>Z9</b>	<b>Joint and several liability</b>
<b>Z9.1</b>	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of the Contract.
<b>Z9.2</b>	The <i>Contractor</i> shall, within 1 week of the Contract Date, notify the <i>Project Manager</i> and the <i>Employer</i> of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
<b>Z9.3</b>	The <i>Contractor</i> does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the <i>Employer</i> .
<b>Z10</b>	<b>Ethics</b>
<b>Z10.1</b>	The <i>Contractor</i> undertakes:
<b>Z10.1.1</b>	not to give any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;
<b>Z10.1.2</b>	to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption and money laundering to which it or the <i>Employer</i> is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.
<b>Z10.2</b>	The <i>Contractor's</i> breach of this clause constitutes grounds for terminating the <i>Contractor's</i> obligation to Provide the Works or taking any other action as appropriate against the <i>Contractor</i> (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.
<b>Z10.3</b>	If the <i>Contractor</i> is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the contract with the <i>Employer</i> , the <i>Employer</i> shall be entitled to terminate the contract in accordance with the procedures stated in core clause 92.2. the amount due on termination is A1.
<b>Z11</b>	<b>Confidentiality</b>
<b>Z11.1</b>	All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the <i>Contractor</i> and shall not be used or divulged or published to any person not being a party to this contract, without the prior written consent of the <i>Project Manager</i> or the <i>Employer</i> , which consent shall not be unreasonably withheld.

- Z11.2** If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.
- Z11.3** This undertaking shall not apply to –
- Z11.3.1** Information disclosed to the employees of the *Contractor* for the purposes of the implementation of this agreement. The *Contractor* undertakes to procure that its employees are aware of the confidential nature of the information so disclosed and that they comply with the provisions of this clause;
- Z11.3.2** Information which the *Contractor* is required by law to disclose, provided that the *Contractor* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to protect such information. The *Contractor* may disclose such information only to the extent required by law and shall use reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed;
- Z11.3.3** Information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time);
- Z11.4** The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*
- Z11.5** The *Contractor* ensures that all his Subcontractors abide by the undertakings in this clause.

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**Z12      *Employer's Step-in rights***

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- Z12.1** If the *Contractor* defaults by failing to comply with his obligations and fails to remedy such default within 2 weeks of the notification of the default by the *Project Manager*, the *Employer*, without prejudice to his other rights, powers and remedies under the contract, may remedy the default either himself or procure a third party (including any subcontractor or supplier of the *Contractor*) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the *Contractor*
- Z12.2** The *Contractor* co-operates with the *Employer* and facilitates and permits the use of all required information, materials and other matter (including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the *Contractor* under the contract or otherwise for and/or in connection with the *works*) and generally does all things required by the *Project Manager* to achieve this end.

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**Z13      *Liens and Encumbrances***

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- Z13.1** The *Contractor* keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The *Contractor*, vis-a-vis the *Employer*, waives all and any liens which he may from time to time have, or become entitled to over such Equipment and any part thereof and procures that his Subcontractors similarly, vis-a-vis the *Employer*, waive all liens they may have or become entitled to over such Equipment from time to time

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**Z14      *Intellectual Property***

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- Z14.1** Intellectual Property ("IP") rights means all rights in and to any patent, design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works.

- Z14.2** IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.
- Z14.3** The *Contractor* gives the *Employer* an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the *works* for the purposes of constructing, repairing, demolishing, operating and maintaining the works
- Z14.4** The written approval of the *Contractor* is to be obtained before the *Contractor's* IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Contractor's* IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP
- Z14.5** The *Contractor* shall indemnify and hold the *Employer* harmless against and from any claim alleging an infringement of IP rights ("**the claim**"), which arises out of or in relation to:
- Z14.5.1** the *Contractor's* design, manufacture, construction or execution of the Works
- Z14.5.2** the use of the *Contractor's* Equipment, or
- Z14.5.3** the proper use of the Works.
- Z14.6** The *Employer* shall, at the request and cost of the *Contractor*, assist in contesting the claim and the *Contractor* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

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**Z16 Dispute resolution:**

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**Z16.1 Appointment of the Adjudicator**

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<p>An <i>Adjudicator</i> is appointed when a dispute arises, from the Panel of Adjudicators below. The referring party nominates an Adjudicator, which nomination is either accepted or rejected by the other party. In the instance of a rejection of the nominated <i>Adjudicator</i>, the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an <i>Adjudicator</i> listed in the Panel of Adjudicators below</p> <p>The Parties appoint the <i>Adjudicator</i> under the NEC3 Adjudicator's Contract, April 2013</p>	<p>Panel of Adjudicators</p> <p>Refer Annexure A</p>
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**Z16.2 Appointment of the Arbitrator**

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	<p>An <i>Arbitrator</i> is appointed when a dispute arises from the Panel of Arbitrators below. The referring party nominates an Arbitrator, which nomination is either accepted or rejected by the other party. In the instance of a rejection of the nominated <i>Arbitrator</i>, the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an <i>Arbitrator</i> listed in the Panel of <i>Arbitrators</i> below</p>	<p>Panel of Arbitrators</p> <p>Refer Annexure A</p>
<b>Z17</b>	<b>Notification of a compensation event</b>	
<b>Z17.1</b>	Delete “eight weeks” in clause 61.3 and replace with “four weeks”. Delete the words “unless the event arises from the Project Manager or the Supervisor giving an instruction, issuing a certificate, changing an earlier decision or correcting an assumption.”	
<b>Z18</b>	<b>BBBEE Certificate</b>	
<b>Z18.1</b>	The <i>Contractor</i> shall be expected to annually present a compliant BEE Certificate. Failure to do adhere to these requirements shall be considered a material breach of the conditions of this Contract, the sanction for which may be a cancellation of this Contract.	
<b>Z19</b>	<b>Communication</b>	
<b>Z19.1</b>	<p><b>Add a new Core Clause</b> 14.5 and 14.6 to read as follows:</p> <p>The <i>Project Manager</i> requires the written consent of the Employer if an action will result in a change to the design, scope, and Works information that is 5% or more</p>	
<b>Z19.2</b>	The <i>Project Manager</i> requires the written consent of the Employer if an action will result in the Completion Date being extended by more than 30 days.	
<b>Z20</b>	<b>Delegation</b>	
	As stipulated by Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993 as amended the <i>Contractor</i> agrees to the following:	
<b>Z20.1</b>	As part of this contract the <i>Contractor</i> acknowledge that it (mandatory) is an employer in its own right with duties as prescribed in the Occupational Health and Safety Act No 85 of 1993 as amended and agree to ensure that all work being performed, or Equipment, Plant and Materials being used, are in accordance with the provisions of the said Act, and in particular with regard to the Construction Regulations	



## Annexure A: ACSA Panel of Adjudicators

One of the following adjudicators shall be selected by the referring party as and when a dispute arises. This panel is valid for a period of three years, commencing on 1 May 2020.

Potential Adjudicator	Email Address	Chamber
Adv. Mkhululi Duncan Stubbs	<a href="mailto:duncan.stubbs@gmail.com">duncan.stubbs@gmail.com</a>	Thulamela Chambers
Adv. Arzhar Bham SC	<a href="mailto:bhamae@law.co.za">bhamae@law.co.za</a>	Victoria Mxenge
Adv. Mohhamed Chohan SC	<a href="mailto:chohann@counsel.co.za">chohann@counsel.co.za</a>	Group One
Adv. Benny Makola	<a href="mailto:benny.makola@gmail.com">benny.makola@gmail.com</a>	Group 621
Adv. Vincent Maleka SC	<a href="mailto:ivmaleka@mweb.co.za">ivmaleka@mweb.co.za</a>	Thulamela Chambers
Adv. Chris Loxton SC	<a href="mailto:loxton@counsel.co.za">loxton@counsel.co.za</a>	Group One

**PART C1.2b CONTRACT DATA****PART TWO – DATA PROVIDED BY THE CONTRACTOR**

Clause	Statement	Data
10.1	The Contractor is (Name): Address:  Telephone No. Fax No.	
11.2	The <i>working areas</i> are	Only the Site Area. See C4 'Site Information'
24.1	The <i>Contractor's Key people</i> are:	<b>CV's to be appended to Tender Schedule</b>
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	

Name:

Job:

Responsibility:

Qualifications:

Experience:

11.2	The <i>completion date</i> is	Twelve (12) months from the <i>Starting Date</i>
11.2	The following matters will be included in the Risk Register	<ul style="list-style-type: none"> <li>• Access to Site</li> <li>• Delay in supply of materials and/or equipment</li> <li>• Progress of works against the program</li> <li>• Airport Operations</li> <li>• Occupational Health and Safety</li> <li>• Existing Services</li> <li>• Travelling public and ACSA stakeholders</li> </ul>
11.2	The <i>Works Information</i> is in	Part C3 'Works Information' section of this contract
31.1	The programme identified in the	Preliminary to be submitted with at contract start

## **PART C1: AGREEMENTS AND CONTRACT DATA**

### **C1.4: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT**

#### **OCCUPATIONAL HEALTH AND SAFETY AGREEMENT**

**AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH & SAFETY ACT (ACT 85 OF 1993) & CONSTRUCTION REGULATION 5.1(k)**

#### **OBJECTIVES**

To assist Airport Company South Africa (ACSA) in order to comply with the requirements of:

1. The Occupational Health & Safety (Act 85 of 1993) and its regulations and
2. The Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993) also known as the (COID Act).

**To this end an Agreement must be concluded before any contractor/ subcontracted work may commence**

**The parties to this Agreement are:**

<b>Name of Organisation:</b>  <b>AIRPORTS COMPANY SOUTH AFRICA KING SHAKA INTERNATIONL AIRPORT</b>
<b>Physical Address:</b> <b>Airport Company South Africa</b>  <b>King Shaka International Airport, La Mercy, KwaZulu-Natal, 4407</b>

**Hereinafter referred to as "Client"**

<b>Name of organisation:</b>  
<b>Physical Address</b>  

**Hereinafter referred to as "the Mandatary/ Principal Contractor"**

**MANDATORY'S MAIN SCOPE OF WORK****GENERAL INFORMATION FORMING PART OF THIS AGREEMENT**

1. The Occupational Health & Safety Act comprises of SECTION 1-50 and all unrepealed REGULATIONS promulgated in terms of the former Machinery and Occupational Safety Act No.6 of 1983 as amended as well as other REGULATIONS which may be promulgated in terms of the Act and other relevant Acts pertaining to the job in hand.
2. "Mandatory" is defined as including as agent, a principal contractor or a contractor for work, but WITHOUT DEROGATING FROM HIS/HER STATUS IN HIS/HER RIGHT AS AN EMPLOYER or user of the plant
3. Section 37 of the Occupational Health & Safety Act potentially punishes Employers (PRINCIPAL CONTRACTOR) for unlawful acts or omissions of Mandatories (CONTRACTORS) save where a Written Agreement between the parties has been concluded containing arrangements and procedures to ensure compliance with the said Act BY THE MANDATARY.
4. All documents attached or refer to in the above Agreement form an integral part of the Agreement.
5. To perform in terms of this agreement Mandatories must be familiar and conversant with the relevant provisions of the Occupational Health & Safety Act 85 of 1993 (OHS Act) and applicable Regulations.
6. Mandatories who utilise the services of their own Mandatories (contractors) must conclude a similar Written Agreement with them.
7. Be advised that this Agreement places the onus on the Mandatory to contact the CLIENT in the event of inability to perform as per this Agreement.
8. This Agreement shall be binding for all work the Mandatory undertakes for the client.
9. All documentation according to the Safety checklist including a copy of the written Construction Manager appointment in terms of construction regulation 8, must be submitted 7 days before work commences.

**THE UNDERTAKING**

The Mandatory undertakes to comply with:

**INSURANCE**

1. The Mandatory warrants that all their employees and/or their contractor's employees if any are covered in terms of the COID Act, which shall remain in force whilst any such employees are present on the Client's premises. A letter is required prior commencing any work on site confirming that the Principal contractor or contractor is in good standing with the Compensation Fund or Licensed Insurer.
2. The Mandatory warrants that they are in possession of the following insurance cover, which cover shall remain in force whilst they and /or their employees are present on the Client's premises, or which shall remain in force for that duration of their contractual relationship with the Client, whichever period is the longest.
  - a. Public Liability Insurance Cover as required by the Subcontract Agreement.
  - b. Any other Insurance cover that will adequately makes provision for any possible losses and/or claims arising from their and /or their Subcontractors and/or their respective employee's acts and/or omissions on the Client's premises.

**COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993**

The Mandatory undertakes to ensure that they and/or their subcontractors if any and/or their respective employees will at all times comply with the following conditions:

1. All work performed by the Mandatary on the Client's premises must be performed under the close supervision of the Mandatary's employees who are to be trained to understand the hazards associated with any work that the Mandatary performs on the Client's premises.
2. The Mandatary shall be assigned the responsibility in terms of Section 16(1) of the OHSAct 85 of 1993, if the Mandatary assigns any duty in terms of Section 16(2), a copy of such written assignment shall immediately be forwarded to the Client.
3. The Mandatary shall ensure that he/she familiarise himself/herself with the requirements of the OHS Act 85 of 1993 and that s/he and his/her employees and any of his subcontractors comply with the requirements.
4. The Mandatary shall ensure that a baseline risk assessment is performed by a competent person before commencement of any work in the Client's premises. A baseline risk assessment document will include identification of hazards and risk, analysis and evaluation of the risks and hazards identified, a documented plan and safe work procedures to mitigate, reduce or control the risks identified, and a monitoring and review plan of the risks and hazards.
5. The Mandatary shall appoint competent persons who shall be trained on any Occupational Health & Safety aspect pertaining to them or to the work that is to be performed.
6. The Mandatary shall ensure that discipline regarding Occupational Health & Safety shall be strictly enforced.
7. Any personal protective equipment required shall be issued by the Mandatary to his/her employees and shall be worn at all times.
8. Written safe working practices/procedures and precautionary measures shall be made available and enforced and all employees shall be made conversant with the contents of these practises.
9. No unsafe equipment/machinery and/or articles shall be used by the Mandatary or contractor on the Client's premises.
10. All incidents/accidents referred to in OHS Act shall be reported by the Mandatary to the Provincial Director: Department of Labour as well as to the Client.
11. No user shall be made by the Mandatary and/or their employees and or their subcontractors of any of the Client's machinery/article/substance/plant/personal protective equipment without prior written approval.
12. The Mandatary shall ensure that work for which the issuing of permit is required shall not be performed prior to the obtaining of a duly completed approved permit.
13. The Mandatary shall ensure that no alcohol or any other intoxicating substance shall be allowed on the Client's premises. Anyone suspected to be under the influence of alcohol or any other intoxicating substance shall not be allowed on the premises. Anyone found on the premises suspected to be under the influence of alcohol or any other intoxicating substance shall be escorted off the said premises immediately.
14. Full participation by the Mandatary shall be given to the employees of the Client if and when they inquire into Occupational Health & Safety.

#### **FURTHER UNDERTAKING**

1. Only a duly authorised representative appointed in terms of Section 16.2 of the OHS Act is eligible to sign this agreement on behalf of the Mandatary. The signing power of this representative must be designated in writing by the Chief Executive Officer of the Mandatary. A copy of this letter must be made available to the Client.
2. The Mandatary confirms that he has been informed that he must report to the Client's management, in writing anything he/she deems to be unhealthy and /or unsafe. He has versed his employees in this regard.
3. The Mandatary warrants that he/she shall not endanger the health & safety of the Client's employees and other persons in any way whilst performing work on the Client's premises.
4. The Mandatary understands that no work may commence on the Client's premises until this procedure is duly completed, signed and received by the Client.
5. Non-compliance with any of the above clauses may lead to an immediate cancellation of the contract.



**ACCEPTANCE BY MANDATARY**

In terms of section 37(2) of the Occupational Health & Safety Act 85 of 1993 and section 5.1(k) of the Construction Regulations 2014,

I .....a duly authorised 16.2 Appointee acting for and on behalf of .....(company name) undertake to ensure that the requirements and the provision of the OHS Act 85 of 1993 and its regulations are complied with.

Mandatory – WCA/ Federated Employers Mutual No.....

Expiry date .....

\_\_\_\_\_  
**SIGNATURE ON BEHALF OF MANDATARY**

(Warrant his authority to sign)

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**SIGNATURE ON BEHALF OF THE CLIENT**  
**AIRPORT COMPANY SOUTH AFRICA**

\_\_\_\_\_  
**DATE**



## **PART C1: AGREEMENTS AND CONTRACT DATA**

### **C1.5: ACSA INSURANCE CLAUSES**

#### **SECTION A: DEFINITIONS**

**Landside** refers to:

- Areas of the airport before the security points, and
- The restricted area beyond the security points but, within the perimeter of gatehouses, passenger terminals and cargo buildings

**Airside** refers to:

- The Apron / manoeuvring areas
- Area within the airside boundary/perimeter fence, excluding the internal areas of the passenger terminals, perimeter gatehouses and cargo building.

#### **SECTION B: INSURANCE CLAUSES**

1. Refer to **Annexure D** for insurance clauses for **Airside Construction Contracts** where the awarded contract value does not exceed R150 million, and the construction period does not exceed 36 months, and the defects liability period does not exceed 24 months.
2. Refer to **Annexure E** for insurance clauses for **Landside Construction Contracts** where the awarded contract value does not exceed R150 million, and the construction period does not exceed 36 months, and the defects liability period does not exceed 24 months

**PART C2: PRICING DATA**

Document reference	Title	Page No.
C2.1	PRICING INSTRUCTIONS: OPTION B	28
C2.2	THE BILL OF QUANTITIES	32

## C2.1 PRICING INSTRUCTIONS: OPTION B

### 1. THE CONDITIONS OF CONTRACT

#### 1.1. How the contract prices work and assesses it for progress payments

Clause 11 in NEC3 Engineering and Construction Contract, June 2005 (with amendments June 2006 and April 2013) (ECC) Option B states:

**Identified and** 11

**defined terms**

11.2 (21) The Bill of Quantities is the *bill of quantities* as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.

(22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.

(28) The Price for Work Done to Date is the total of

- the quantity of the work which the *Contractor* has completed for each item in the Bill of Quantities multiplied by the rate and
- a proportion of each lump sum which is the proportion of the work covered by the item which the *Contractor* has completed.

Completed work is work without Defects which would either delay or be covered by immediately following work.

(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

### 2. FUNCTION OF THE BILL OF QUANTITIES

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that instructions to do work or how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

### 3. MEASUREMENT AND PAYMENT

#### 3.1. Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	Percent
h	Hour
m	Metre
mm	Millimetre
m <sup>2</sup>	square metre
No.	Number
Prov sum <sup>1</sup>	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1 000 kg)
W/day	Work day

#### 4 ADDITIONAL PRICING INSTRUCTIONS

1. The Contract Data, Service information, drawings and any other documents relevant to this tender must be read in conjunction with the Bill of Quantities. The Contract Data is according to NEC3 ECC: Option B - Priced contract with Bill of Quantities. The provided bill is to guide the contractor in pricing the works he expects to carry as per the scope of work.
2. The contractor must plan the work in this contract as a set of activities. These should be the same activities as he/she shows on his/her programme.
3. Clause 63.13 in Option B provides that these rates and Prices may be used as a basis for assessment of compensation events instead of Defined Cost.
4. This Bill of quantities covers the Prov Sums that will be measurable.
5. The Bill of quantities as completed by the Contractor shall be VAT exclusive prices and shall cover, "inter alia" all general risks, liabilities, obligations, profit, expenses, costs, bonuses, all allowances such as shift and standby allowances, sick-leave, other leave, brackets, fixings, incidentals, consumables etc. that will be required to successfully complete the works as set forth or as implied in the documents on which this Contract is based.
6. The description of each Prov Sum shall, unless otherwise stated herein, be held to include making, conveying and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates, plant, temporary works, return of packaging, establishment charges, profit and all other obligations arising out of the scope of works.
7. No alterations to the original text shall be allowed. If any alterations are made, they will be ignored, and the original wording will apply.
8. Variations in the scope and extent of the work shall be allowed to meet the Project Manager requirements and shall be measured and priced at the rates entered in the bill of quantities, where appropriate, and shall form an addition to or deduction from the total of the Accepted Contract Amount. Any Prov Sums or variations for which rates have not been included in the bill of quantities shall be agreed and priced as non-scheduled Prov Sums.
9. All provisional sums and contingency amounts shall be expended as directed by the Project Manager and any balance remaining shall be deducted from the contract sum.
10. No commitment to expending any portion of the contingency amounts and/or provisional sums are made or implied by the Employer.
11. The Contractor shall not be entitled to any claim in instances where provisional sums are partially or in total removed from the contract.
12. Upon appointment, the bidder must further develop detailed specifications with detailed bills of quantities and must be submitted to ACSA within 30 Calendar days from the date appointment with no change to the original tender price. All allowances which formed part of the pricing schedule which belong to the client must form part of the bills of quantities (All client allowances included on the original tendered price will be managed by ACSA)
13. The bills of quantities to be drawn up in accordance with the standard system of measuring building work (as amended) published and issued by the South African Association of Quantity Surveyors.

##### Where applicable

- a. Civil engineering work to be drawn up in accordance with the provisions of the latest edition of the SANS standardized specifications for civil engineering works where applicable.
- b. Mechanical work to be drawn up in accordance with the provisions of the Model Bills of Quantities for Mechanical work, published by the South African Association of Quantity Surveyors.
- c. Electrical work to be drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical work, published by the South African Association of Quantity Surveyors.

- It will be assumed that prices tendered are based on incorporating relevant Acts, Ordinances, Regulations, By - Laws, National Standards and International standards as it applies to the scope of works.
14. Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
  15. The amount of the preliminaries to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount for the preliminaries and any amount in respect of contract price adjustment provided for in the contract.

**Part C2.2 BILL OF QUANTITIES**

Item.	Description	UoM	Units	Rate	Amount
<b>1</b>	<p><b>Condition assessment conducted by ECSA Registered Professional Engineer with more than 5 years pavement engineering experience as a registered engineer.</b></p> <p><b>The assessment shall be presented in the form of a comprehensive report reviewed and signed by a professionally registered engineer. The assessment report shall include findings illustrating observed defects, risk levels and recommended maintenance solutions with a minimum lifespan of 5 years.</b></p>				
1.1.	Runway 06/24 Condition Assessment (60 m wide x 3700 m long flexible asphalt runway.)	Sum	1		
1.2.	Taxiway Condition Assessment (25 meters wide flexible asphalt pavement)				
.2.1.	Taxiway A = 3700 m	Sum	1		
1.2.2.	Taxiway B = 640 m	Sum	1		
1.2.3.	Taxiway C = 345 m	Sum	1		
1.2.4.	Taxiway E = 155 m	Sum	1		
1.2.5.	Taxiway F = 550 m	Sum	1		
1.2.6.	Taxiway G = 380 m	Sum	1		
1.2.7.	Taxiway H = 380 m	Sum	1		
1.2.8.	Taxiway M = 190 m	Sum	1		
1.2.9.	Taxiway N = 390 m	Sum	1		
1.2.10.	Taxiway P = 159 m	Sum	1		
1.3.	Service Road Condition Assessment	Sum	1		

1.4.	Apron Condition Assessment (350 mm thick rigid concrete slabs)	Sum	1		
1.4.1.	Apron A = 36000 m <sup>2</sup>	Sum	1		
1.4.2.	Apron B = 20000 m <sup>2</sup>	Sum	1		
1.4.3.	Apron C = 15000 m <sup>2</sup>	Sum	1		
1.4.4.	Apron D = 16000 m <sup>2</sup>	Sum	1		
1.5.	Taxilane Condition Assessment (49 m wide x 825 m long flexible asphalt taxilane between Apron A and B)	Sum	1		
<b>2</b>	<b>Runway emergency repairs</b>				
2.1.	Longitudinal and transverse crack sealing	m	3000		
2.2.	Raveling repairs along both touchdown zones	m <sup>2</sup>	5 000		
2.3.	Runway surface core test hole and lightning strike hole repairs				
2.3.1.	0 to 50 mm diameter	No	50		
2.3.2.	51 to 100 mm diameter	No	20		
2.3.3.	>100 mm diameter	No	10		
<b>3</b>	<b>Taxiway emergency repairs</b>				
3.1	Longitudinal and/or transverse crack sealing	m	2 000		
3.2	Raveling repairs	m <sup>2</sup>	500		
3.3	Pothole repairs	m <sup>2</sup>	20		
<b>4</b>	<b>Service road repairs</b>				
4.1.	Pavement depression/rutting repairs along service road on Alpha and Charlie apron, depressions to be repaired by resurfacing the top wearing coarse as per as-built drawings and specifications, the final repaired surface to flush with in-situ pavement.	m <sup>2</sup>	500		
<b>5</b>	<b>Concrete apron crack repairs</b>				
5.1.	Apron edge cracks:	m <sup>2</sup>	20		



	<p>The concrete apron edge cracks to be repaired by means of cutting off the top cracked section of a 350 mm deep concrete slab to the depth of 100 mm and replace the excavated section by grouting precast concrete blocks typically 200x200x100 mm deep precast sections. Precast blocks to have the same concrete strength as the in-situ apron slab.</p> <p>To minimize operational impact, a fast setting grout to be used to bind the precast section to the in-situ apron slab, the repaired apron parking bay shall be ready to accommodate aircraft traffic within 48 hours of down-time.</p>				
5.2.	<p>Expansion joint sealant repairs:</p> <p>The worn expansion joint sealant to be replaced with similar approved sealant. The same sealant to be used to seal joints around new precast joints for crack repairs as stated in 5.1 above.</p>	m	150		
<b>6</b>	<b>Airports Tared Roads</b>				
6.1.	<p>Pothole repairs:</p> <p>Repair and seal potholes including stabilising the damaged base layers to achieve the required road strength as per as-built drawings, SANRAL Road Maintenance Manual and relevant specifications.</p>	m <sup>2</sup>	200		
6.2.	<p>Isolated resurfacing:</p> <p>Locally resurface areas affected by raveling, rutting, fatigue cracking, bleeding and depression. Resurfacing to be as per as-built drawings, SANRAL Road Maintenance Manual and relevant specifications.</p>	m <sup>2</sup>	500		
6.3.	Longitudinal crack sealing using class C-E1 modified binder crack sealing.	m	1000		
6.4.	Speed hump repairs and installation				
6.4.1.	New speed hump installation	No	2		

6.4.2.	Remove and replace existing steel dome speed hump with new approved speed hump that complies to published traffic regulations.	No	4		
7	Permit costs provisional sum (Proven costs, no handling fees)	Sum	1	R20 000	R 20 000
8	Safety file (Provisional sum)	Sum	1	10 000	R 10 000
9				<b>Subtotal</b>	
10	Contingencies (10 % of subtotal)	%	10		
11	<b>Total Excl VAT (Item 9+10)</b>	<b>R</b>			
12	<b>VAT</b>	<b>R</b>			
13	<b>Total Incl VAT</b>	<b>R</b>			

**PART 3: WORKS INFORMATION**

Document reference	Title	Page No
C3.1	<i>Employer's Works Information</i>	[34]
C3.2	<i>Contractor's Works Information</i>	[38]

## **PART C3**

# **SERVICE INFORMATION (SCOPE / SPECIFICATIONS)**

### **C3 WORKS INFORMATION**

#### **C3.1: EMPLOYER'S WORKS INFORMATION**

The scope of service will include pavement assessment for all aircraft maneuvering areas (runway, taxiway, taxilane and apron) and service roads, flexible and rigid pavement crack sealing, asphalt raveling repairs, pothole repairs, pavement depression repairs, rutting repairs, speed hump installations. The works will be carried out as per the pavement assessment recommendations and specifications.

#### **APRON CONCRETE REPAIRS AND CORNER BREAKS**

Partial depth repairing of areas on the concrete apron parking stands that have corner cracks, edge breaks and previous repairs that have subsequently failed will form part of these works.

**The service will entail the following:**

- Breaking of rigid pavement damaged areas
- Removal of unsound or flaking concrete
- Patching the damaged concrete slab area

The concrete apron edge cracks to be repaired by means of cutting off the top cracked section of a 350 mm deep concrete slab to the depth of 100 mm and replace the excavated section by grouting precast concrete blocks typically 200x200x100 mm deep precast sections. Precast blocks to cure in a controlled environment and shall have same concrete strength as the in-situ apron slab.

To minimize operational impact, a high strength fast-setting grout to be used to bind the precast section to the in-situ apron slab, the repaired apron parking bay shall be ready to accommodate aircraft traffic within 48 hours of down-time.

#### **Method of Work:**

- The service provider shall saw-cut and chip concrete at all damaged areas to a maximum depth of 100mm, the excavated area shall be in multiple of rectangular precast blocks.
- The equipment and method used to break out concrete shall be such that no reinforcing steel are loosened, damaged, or removed.
- The preparation shall be such as to leave a sound, roughed exposed concrete layer free from dust and loose particles.
- Application of the quick setting mortar should be conducted according to the manufacture's specifications.
- The precast blocks to be casted and cured as per SANS 2001-CC1.
- The service provider shall prepare a detailed statement covering the full execution of the apron crack repairs.
- Joints between precast concrete blocks to be sealed with high strength fast setting motor.
- Joints between in-situ concrete and precast joints to be sealed with polysulphide joint sealant (SABS 110-1973) or similar approved on flat backing strip.

#### **ASPHALT CRACK SEALING SPECIFICATIONS**

The material specification shall be as prescribed in COLTO Section 4800: Treatment of an existing surface exhibiting certain defects, with the following amendments:

**B4802 Materials**

*Add the following:*

The classification of modified binders for crack sealing shall be as shown in the table 1 below.

Table 1: Classification of Modified Binders for crack sealing

Classification of Modified Binders for crack sealing	
Modified Binder Class (C)	Application
C – E1	Crack Sealant – Hot applied
C – R1	Crack Sealant – Hot applied

The letter codes used in the classification are defined as follows:

C – crack seal applications (hot applied)

E – a polymer of the elastomer type (e.g. SBR, SBS etc)

R – Bitumen Rubber type

The binders to be used on this contract for the sealing of cracks shall be C – E1. The properties of the crack sealant shall conform to the requirements listed in table 2 as per TG1 (Technical guideline: The use of modified bituminous binders in road construction)

Table 2: Properties for modified binder crack sealants

Properties for modified binder crack sealants			
Property	Unit	Test Method	C – E1
Softening point (R&B)	°C	MB - 17	80 (min)
Elastic recovery @ 15°C	%	MB - 04	80 (min)
Flow @ 60°C	mm	MB - 12	Nil
Resilience	%	MB - 10	N/A
Torsion recovery @ 15°C	%	MB - 05	Report
Solids content (m/m)	%	MB - 22	N/A
Dynamic Viscosity @ 165°C	Pa.s	MB - 18	0.65 (max)
Dynamic viscosity (Haake @ 190°C)	Dpa.s	MB - 13	N/A
Dynamic Viscosity @ 25°C	Pa.s	MB - 18	N/A

**B4803 Plant and Equipment****(b) Equipment for crack sealing**

The contractor shall inter alia provide the following equipment for crack sealing:

**(i) Blowing out cracks**

The contractor shall provide a mobile compressor capable of discharging at least 3-m<sup>3</sup>/min compressed air at 650kPa pressure. The compressed air shall be free of deleterious matter that may adversely affect the bond between the sealant and the cracks. The compressor shall be free of oil, and diesel leaks.

A lance shall be used to direct the force of the air into the cracks and must be sufficiently maneuverable to enable the path of the crack to be followed accurately.

If hot air is specified, the compressed air must be heated by a hot air lance capable of achieving a temperature of 300°C in the combustion chamber.

**(ii) Sealant applicator**

"The sealant shall be applied through an applicator manufactured specifically for this purpose. Essentially the equipment for the hot sealant shall consist of a mobile vessel capable of heating the sealant to the required application temperature by indirect heat and controlled by a thermostat to prevent overheating. A calibrated thermometer shall be fitted in an accessible position to accurately measure the sealant temperature in the tank. Special pumps, which can deliver the sealant to the crack in a controlled manner, shall be used.

The sealant shall only be applied with pressure type application equipment to ensure that the cracks are filled rather than covered.

The contractor shall ensure that all equipment is kept clean so as to prevent blockages and resultant poor workmanship."

## **B4804 CONSTRUCTION**

### **(e) Sealing cracks**

*Add the following:*

"Prior to sealing, areas for sealing shall be delineated by the service manager."

#### **(ii) Preparation**

*Add the following:*

"The cracks shall be blown out with heated ("hot air lance") compressed air. All dirt, grit and other base or foreign matter shall be blown out and be removed from the cracks and pavement surface."

#### **(iii) Cracks smaller than 3 mm**

*Add the following:*

"No cracks smaller than 3 mm width shall be sealed unless so ordered by the service manager."

#### **(iv) Cracks of 3 mm and wider**

*Add the following:*

"Cracks shall first be cleaned before the crack is sealed. The sealant shall be forced into the cracks by means of the specified sealant applicator. The contractor shall ensure that the sealant mixture actually penetrates the crack and does not merely cover the crack in the form of a bandage. All excess sealant on the road surface wider than 30mm on either side of the crack, and thicker than 1mm, shall be removed, and shall not be paid for."

## **ASPHALT PAVEMENT REPAIRS**

Pavement defects due to traffic loading, deterioration due to the operations and natural aging of the pavements may occur from time to time. Repair works will be required which will entail the following but not limited to:

- Saw cut and/or excavate the defective area.
- Clean excavation and apply tack coat
- Reinstatement pavement with asphalt mix as recommended by the pavement engineer to the specific depth.
- Asphalt wearing course must be flush against surrounding areas/edges and all edges are to be properly sealed.
- Compact the asphalt layers to refusal density.
- Hot-mix asphalt temperature is to be closely monitored to ensure that the optimum density is achieved.

**Special Notes for Service:**

- All rates to exclude VAT.
- Normal working hours shall be split between night and day works depending on the task and Airport operations:
  - Day works will be 07h30 to 16h30 Monday to Friday
  - Night works will be 21h30 to 4:00am Monday to Friday
- The contractor shall comply with all relevant Aviation and other applicable laws, rules and regulations.
- The service provider is required to provide 6 months defects liability on works.
- Service provider to make cash payment for all permit costs, vehicle branding, reimbursed on invoicing.
- Service provider vehicles to comply to airside policy for permit. (Vehicle age to be less than 7 years)

### **C3.2    *CONTRACTOR'S WORKS INFORMATION***

All Plant and Materials to execute the works must meet all requirements and specifications as stipulated in the Works information, drawings and BOQ.



## PART C4: SITE INFORMATION

Document reference	Title	Page No
C4	Site Information	[39]

Core clause 11.2(16) states

“Site Information is information which describes the Site and its surroundings and is in the documents which the Contract Data states it is in.”

In Contract Data, reference has been made to this Part 4 of the contract for the location of Site Information.

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### Description of the Site and its surroundings

#### General description

The site is located at King Shaka International Airport, works will be performed in a live environment with ongoing airport operations.

#### Existing buildings, structures, and plant & machinery on the Site

Live air traffic, manoeuvring area (apron, taxiway, runway, service roads), terminal building, underground services, boarding bridges

#### Subsoil information

As per the existing reports and drawings.

#### Hidden services

The contractor is to work carefully to ensure that services that may be hidden are not damaged during repairs and is to make the employer aware of such services.

#### Other reports and publicly available information

The drawings issued along with any comments and remarks are to be deemed as the available information from employer.